

May 20, 2003

10 CFR 50.73


U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

PALISADES NUCLEAR PLANT
DOCKET 50-255
LICENSE NO. DPR-20
LICENSEE EVENT REPORT 03-003, LOSS OF SHUTDOWN COOLING AND
EMERGENCY DIESEL GENERATOR START

Licensee Event Report (LER) 03-003 is attached. The LER describes the loss of shutdown cooling and starting of emergency diesel generators that resulted from a loss of offsite power. This occurrence is reportable in accordance with 10 CFR 50.73(a)(2)(v)(B) as an event that prevented the fulfillment of the safety function of a system needed to remove residual heat, and in accordance with 10 CFR 50.73(a)(2)(iv)(A), as an event that resulted in automatic actuation of the emergency ac electrical power system.

SUMMARY OF COMMITMENTS

This letter contains no new commitments and no revisions to existing commitments.



Douglas E. Cooper
Site Vice-President, Palisades

CC Regional Administrator, USNRC, Region III
 Project Manager, USNRC, NRR
 NRC Resident Inspector – Palisades

Attachment

LICENSEE EVENT REPORT (LER)

(See reverse for required number of
digits/characters for each block)

Estimated burden per response to comply with this mandatory information collection request: 50 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet e-mail to bis1@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202 (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

1. FACILITY NAME

PALISADES NUCLEAR PLANT

2. DOCKET NUMBER

05000255

3. PAGE

1 OF 3

4. TITLE

LOSS OF SHUTDOWN COOLING AND EMERGENCY DIESEL GENERATOR START

5. EVENT DATE

MO DAY YEAR
03 25 2003

6. LER NUMBER

YEAR SEQUENTIAL REV
NUMBER NO
2003 - 003 - 00

7. REPORT DATE

MO DAY YEAR
05 20 2003

8. OTHER FACILITIES INVOLVED

FACILITY NAME DOCKET NUMBER

FACILITY NAME DOCKET NUMBER

9. OPERATING
MODE

6

10. POWER
LEVEL

0

11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR, (Check all that apply)

20.2201(b)	20.2203(a)(3)(ii)	50.73(a)(2)(ii)(B)	50.73(a)(2)(ix)(A)
20.2201(d)	20.2203(a)(4)	50.73(a)(2)(iii)	50.73(a)(2)(x)
20.2203(a)(1)	50.36(c)(1)(i)(A)	X 50.73(a)(2)(iv)(A)	73.71(a)(4)
20.2203(a)(2)(i)	50.36(c)(1)(ii)(A)	50.73(a)(2)(v)(A)	73.71(a)(5)
20.2203(a)(2)(ii)	50.36(c)(2)	X 50.73(a)(2)(v)(B)	OTHER
20.2203(a)(2)(iii)	50.46(a)(3)(ii)	50.73(a)(2)(v)(C)	Specify in Abstract below or in
20.2203(a)(2)(iv)	50.73(a)(2)(i)(A)	50.73(a)(2)(v)(D)	NRC Form 366A
20.2203(a)(2)(v)	50.73(a)(2)(i)(B)	50.73(a)(2)(vii)	
20.2203(a)(2)(vi)	50.73(a)(2)(i)(C)	50.73(a)(2)(viii)(A)	
20.2203(a)(3)(i)	50.73(a)(2)(ii)(A)	50.73(a)(2)(viii)(B)	

12. LICENSEE CONTACT FOR THIS LER

NAME

Barb Dotson, Regulatory Analyst

TELEPHONE NUMBER (Include Area Code)

(269) 764-2265

13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANU- FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU- FACTURER	REPORTABLE TO EPIX

14. SUPPLEMENTAL REPORT EXPECTED

YES (If yes, complete EXPECTED SUBMISSION DATE) X NO

15. EXPECTED
SUBMISSION
DATE

MONTH DAY YEAR

16. ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On March 25, 2003, at 1116 hours, with the plant in Mode 6, a loss of offsite power occurred while installing a signpost. The signpost penetrated a buried conduit, damaging a control power cable associated with both offsite power feeds. As a result, the safety-related and non-safety related buses de-energized, which caused a loss of shutdown cooling flow. The emergency diesel generators started and loaded safety-related buses, as expected. An Alert was declared at 1126 hours. Shutdown cooling flow through the core was restored in approximately 20 minutes. The Alert was downgraded to an Unusual Event at 1231 hours. The Unusual Event was exited on March 27, 2003, at 1737 hours, when offsite power was fully restored.

This occurrence is reportable in accordance with 10 CFR 50.73(a)(2)(v)(B) as an event that prevented the fulfillment of the safety function of a system needed to remove residual heat, and in accordance with 10 CFR 50.73(a)(2)(iv)(A), as an event that resulted in automatic actuation of the emergency AC electrical power system.

LICENSEE EVENT REPORT (LER)

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
PALISADES NUCLEAR PLANT	05000255	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 3
		2003	003	00	

17. NARRATIVE (If more space is required, use additional copies of NRC Form 366A)

EVENT DESCRIPTION

On March 25, 2003, at 1116 hours, with the plant in Mode 6, a loss of offsite power occurred while installing a signpost. The signpost penetrated a buried conduit, damaging a control power cable associated with both offsite power feeds. As a result, the safety-related and non-safety related buses de-energized, which caused a loss of shutdown cooling [BP] flow. The emergency diesel generators [DG;EK] started and loaded safety-related buses, as expected. An Alert was declared at 1126 hours. Shutdown cooling flow through the core was restored in approximately 20 minutes. The Alert was downgraded to an Unusual Event at 1231 hours. The Unusual Event was exited on March 27, 2003, at 1737 hours, when offsite power was fully restored.

This occurrence is reportable in accordance with 10 CFR 50.73(a)(2)(v)(B) as an event that prevented the fulfillment of the safety function of a system needed to remove residual heat, and in accordance with 10 CFR 50.73(a)(2)(iv)(A), as an event that resulted in automatic actuation of the emergency AC electrical power system.

ANALYSIS

Two offsite power feeds from the switchyard [FK] to the plant were being maintained operable. Some of the control circuits involving both of these offsite power feeds were routed in the same cable.

While installing a signpost in the main parking lot, a conduit was penetrated, damaging the cable containing the control circuits for both offsite power feeds. This caused a spurious actuation of several relays. Actuation of these relays resulted in the opening of breakers, interrupting power from the switchyard to the plant.

The de-energized safety-related buses resulted in loss of power to the operating low pressure safety injection (LPSI) pump [P;BP] that was providing shutdown cooling flow. The emergency diesel generators started and loaded as designed. The LPSI pumps are not automatically re-energized from the emergency diesel generator under these circumstances. Shutdown cooling flow was restored in approximately 20 minutes, when operators manually started a LPSI pump, with an emergency diesel generator supplying power to the pump's bus.

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17. NARRATIVE (If more space is required, use additional copies of NRC Form 366A)

CAUSE OF THE EVENT

There was no written process for controlling excavating/trenching/piercing the ground. Additionally, NMC missed an opportunity in May 2002 to identify the lack of procedural controls when an inadequate evaluation was performed for a previous event.

CORRECTIVE ACTIONS

A plant policy was issued prohibiting all digging and landscaping activities without appropriate approval and oversight.

The damaged cable was repaired, and the control circuits for one of the two offsite power feeds were relocated to a separate cable.

A procedure is being written to control excavating/trenching/piercing activities.

SAFETY SIGNIFICANCE

All safety systems functioned as designed. Primary coolant system temperature increased from approximately 92°F to 104°F. The average hourly heat-up rate limit specified in Technical Specification 3.4.3 was not exceeded. Fuel integrity was not challenged.

PREVIOUS SIMILAR EVENTS

Palisades has had several instances where equipment or cabling was damaged as a result of excavation/digging/trenching activities; however, none have caused a loss of offsite power.